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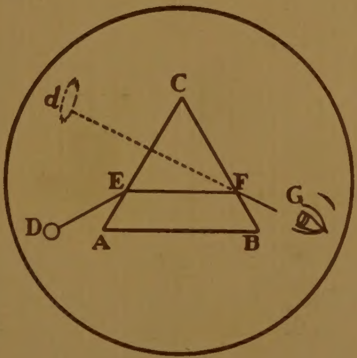

CUMULATIVE INDEX

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Preface

In 1974 the Optical Society of America began production of the annual indices for its journals from information stored on magnetic tape during the production of each issue of the journals. The purpose of the program was not only to produce an annual index for the journals but to be able to produce a merged cumulative index to all of the journals of the Society. This cumulative index is our first effort.

The indexed material includes subject and author entries for Volume 64 through 69 (1974–1979) of the *Journal of the Optical Society of America*, Volume 13 through 18 (1974–1979) of *Applied Optics* and Volume 1 through 4 (1977–1979) of *Optics Letters*.

Subjects are indexed by keyword in contrast to a hierarchical system that is typically used in indexing schemes which cover a broader area of science and technology. A familiar example of a hierarchical system is PACS (Physics and Astronomy Classification Scheme) used by the American Institute of Physics for its journals and those of several of its member societies. In a keyword system all entries have equal weight. Those unfamiliar with the general subject may find more difficulty in finding entry to a key word system than to a hierarchical system in which there may be only ten to five entries to consider at each level. On the other hand, a key word system may be searched far more rapidly by an individual conversant with the research terms currently in use. The user should remember that there is a style connected with key words: lasers not masers; integrated optics not guided waves. The style changes with time and the indexer leads the users to old styles through the use of See and See also entries which follow many of the major headings. Keep these entries in mind when using the index.

Those responsible for the publication of the index believed that the experience garnered in six years of computerized annual indices would ease many of the problems associated with the cumulative index, and so it did. However, it must be said again that multiple versions of an individual's name cause confusion in the author index and many of these difficulties do not appear in the annual index. In the ideal world, all subjects entries appear under each author's name in the subject index. In the real world, where real may be taken to mean without human intervention, any variation in proper name results in a separate entry. Thus, if Isaac K. Newton used this version of his name for some papers, I. K. Newton and Isaac Newton for others, there would be three author entries. Attempts have been made to eliminate these discrepancies, but readers are cautioned that some may remain.

To aid in identification of the material key letters are given in many cases:

(T) emphasis on theory
(E) emphasis on experiment
(A) abstract
(B) book review
(L) letter, rapid communication
(M) meeting report
(N) announcement, editorial, or note in one of the departments
(P) patent

The author index has the title given under the first-named author only; volume and page are given under other authors. Under a given author all entries are alphabetized by the first word of title, irrespective of whether there are additional authors. It might be appropriate to note here that usage varies as to which word in a subject comes first, e.g., Spectroscopy, atomic, but Spatial filters.

This publication will appear with four different covers: one for each of the three OSA journals and a fourth cover with the title, OPTICS INDEX. All nonmember subscribers to the Society's 1980 journals are receiving a copy of the index to shelve with their backholdings; these copies carry the cover of the appropriate journal. Individual purchasers of the index receive the version with the OPTICS INDEX title.

Three people can be closely identified with the success of this publication: Les Varley of Mack Printing who had the forethought necessary to develop computer programming and documentation that has survived the past six years; Franklin S. Harris, Jr., who had the patience and competence to review and index each and every published article, letter, abstract, and column; Patricia R. Wakeling who had the enthusiasm and vision to propose the most useful possible index for the optics community and see the project through to completion. The index is ample testimony to their efforts.

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Beynon, John H., 1979 Maurice F. Hasler Award (N), AO **17:** 3592
Chamberlain, John, Institution of Electrical Engineers Gyr and Landis Prize for 1973 (N), AO **13:** 6A14
Cleek, Given W., Commerce Dept. Silver Medal (N), AO **13:** 3A16
Crawford, Bryce awarded Lippincott Medal (N), AO **17:** 2824
Davidson, Hugh, Inter-Society Color Council's Godlove Award (N), AO **16:** 2331
Evans, Ralph M., SMPTE makes honorary member (N), AO **13:** 3A15
Frank, Charles, Crystal Growth Award of the American Association for Crystal Growth (N), AO **17:** 3778
Herzberg, Gerhard "The Prize" (N), AO **17:** 1983
Guinier, Andre, Fankuchen award in x-ray crystallography for 1974 (N), AO **13:** 6A14
Herschberg, Joseph G., Florida Section OSA makes honorary member (N), AO **13:** 3A15
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Hurvich, Lee M., and Dorothea Johnson, ISCC Godlove Award and American Psychological Assoc. Award (N), AO **13:** 3A16
Jacox, Marilyn E., and Dolphus E. Milligan, NBS Stratton Award (N), AO **13:** 3A16
Johnson, Dorothea, and Leo M. Hurvich, ISCC Godlove Award and American Psychological Assoc. Award (N), AO **13:** 3A16
Jones, R. Clark, awarded the 1977 Thomas Young Medal and Prize (N), AO **16:** 2978
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Milligan, Dolphus E., and Marilyn E. Jacox, NBS Straton Award (N), AO **13:** CA16
Morrison, George H., presented 1975 medal by New York Section of the Society for Applied Spectroscopy (N), AO **15:** 920
Plyler, Earle K., APS Beams Award (N), AO **13:** 3A15
Reynolds, Bruce R., and Irving R. Abel, First Rudolf Kingslake Medal and Prize SPIE (N), AO **15:** 914
Schawlow, Arthur L., Marconi International Fellowship Awardee (N), AO **16:** 1310
Taylor, J. H., Peagram Award, Southeastern Section of the American Physical Society (N), AO **18:** 385
Upatnicks, Juris, and Emmett N. Leith, Inventor of the Year Award (N), AO **15:** 995
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USC, uniform color scales

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